

### Amendments to the Specification

At page 2 of the Office Action, the Examiner objects to the disclosure because of the following informalities:

At page 10, line 30 of the specification "rotor assemblies 49" does not appear on any of the Figures; and

At page 11, line 24 of the specification "stub shafts 46" is incorrect. The reference numeral should be "stub shafts 36".

In response, please amend the specification by deleting the paragraph beginning on page 10, line 29 continuing to page 11, line 13, and replacing the deleted paragraph with the following paragraph marked up to show the changes made:

"As best seen in Figs. 1 and 2, rotor assembly 18 is constructed by axially sliding ~~rotor assemblies 49~~ ring assemblies 48 onto rotor 38 such that lobes 42 of rotor 38 extend through a corresponding lobe-shaped cutouts 76 in magnet retention ring 50 and gaps 86 defined by laminated pole pieces 70 of corresponding stacks 80 of ring assemblies 48. Retaining bars 74 projecting from end surfaces 72 of magnet retention elements 56 are seated within corresponding retaining bar receipt cavities 54 in second sides 50b of magnet retention ring 50 of adjacent ring assemblies 48a, Figs. 2 and 5, as heretofore described, in order to interlock adjacent ring assemblies 48. Magnets 52a-52d are slid axially along corresponding lands 40a-40d of outer surface 40 of rotor 38 such that magnets 52a-52d extend through corresponding magnet cutouts 78 in ring assemblies 48 and such that magnets 52a-52d are disposed between corresponding pairs of stacks 80 of laminated pole pieces 70 in ring assemblies 48. It is contemplated

to provide shims 92 between magnets 52a-52b and radially inner surfaces 58 of corresponding magnet retention elements 56 of each ring assembly 48 so as to prevent radial movement of magnets 52a-52d during the rotation of rotor assembly 18, and thermal growth of the rotor 18 as the machine warms during operation.”

Please also amend the specification by deleting the paragraph beginning on page 11, at line 14 continuing to line 27, and replacing the deleted paragraph with the following paragraph marked up to show the changes made:

“After ring assemblies 48 and magnets 52a-52d are assembled on rotor 38, second end plate 96 is secured to terminal end 38a of rotor 38 to maintain ring assemblies 48 and magnets 52a-d thereon. Second end plate 96 includes a plurality of circumferentially spaced bolt openings 98 which are axially aligned with corresponding bolt receipt apertures 100 formed in terminal end 38a of rotor 38. Bolts 102 extend through corresponding openings 98 in second end plate 96 and into bolt receipt apertures 100 in terminal end 38a of rotor 38 so as to interconnect second end plate 96 to rotor 38. Second end plate 96 includes a central aperture 104 for allowing stub shaft 106, operatively connected to terminal end 38a of rotor 38 in any conventional manner, to pass therethrough. As best seen in Fig. 1, stub shafts 46 36 and 106 pass through corresponding bearings 108 and 110, respectively, in sidewalls 112 and 114, respectively, of enclosure 12 so as to rotatably support rotor assembly 18. In its assembled condition, it can be appreciated that electromechanical machine 10 may be utilized as an electric motor or a generator.”

### Amendments to the Claims

At pages 2 – 4 of the Office Action, the Examiner rejects claims 1, 3 – 4, 10, 13 – 14, and 18 – 19 under 35 U.S.C. §102(b) as being anticipated by Noodleman (U.S. Patent No. 3,979,821). At page 4 of the Office Action, the Examiner states that claims 2, 5 – 9, 11 – 12, and 15 – 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Please amend claims 1, 5, 10 and 12, cancel claims 2 and 11, and add new claims 30 - 36 as set forth below in the Listing of Claims.

#### Listing of Claims:

Claim 1 (currently amended): A rotor assembly for an electromechanical machine, comprising:

a rotor connectable to a shaft for rotational movement therewith, the rotor extending along an axis and having first and second circumferentially spaced lobes projecting radially therefrom;

first and second sets of laminated pole pieces, each set of pole pieces receivable on a corresponding lobe; and

a magnet disposed between the sets of pole pieces; and

a magnet retention ring for preventing radial movement of the magnet, the magnet retention ring having a radially outer edge and comprising a backing plate having first and second cutouts therein for receiving corresponding lobes therethrough and a magnet retention element projecting from a first side of the backing plate and

extending between the first and second sets of laminated pole pieces.

Claim 2 (cancelled)

Claim 3 (original): The rotor assembly of claim 1 wherein each lobe projecting from the rotor includes a neck terminating at an enlarged head.

Claim 4 (original): The rotor assembly of claim 3 wherein each of the laminated pole pieces is generally C-shaped and includes first and second ends separated by a predetermined distance for accommodating the neck of a corresponding lobe therebetween.

Claim 5 (currently amended): The rotor assembly of claim 2 1 wherein the magnet retention element includes a radially outer surface extending between the first and second sets of laminated pole pieces and an inner surface directed towards the magnet.

Claim 6 (original): The rotor assembly of claim 5 further comprising a shim positioned between the inner surface of the magnet retention element and the magnet for preventing radial movement of the magnet during rotation of the rotor.

Claim 7 (original): The rotor assembly of claim 1 wherein each set of laminated pole pieces includes a plurality of first pole pieces having a first radial thickness and a

plurality of second pole pieces having a second radial thickness.

Claim 8 (original): The rotor assembly of claim 7 wherein the plurality of first pole pieces of a corresponding set of laminated pole pieces are positioned adjacent each other to form a first stack and wherein the plurality of second pole pieces of the corresponding set of laminated pole pieces are positioned adjacent each other to form a second stack.

Claim 9 (original): The rotor assembly of claim 7 wherein the first radial thickness is greater than the second radial thickness.

Claim 10 (currently amended): A rotor assembly for an electromechanical machine, comprising:

a rotor connectable to a shaft for rotational movement therewith, the rotor extending along an axis and having a plurality of circumferentially spaced lobes projecting radially therefrom;

a plurality of ring assemblies supported on the rotor, each ring assembly ~~including~~ comprising a plurality of ~~circumstantially~~ circumferentially spaced poles supported on corresponding lobes and a magnet retention ring having a radially outer edge and including a backing plate having a plurality of cutouts therein for receiving corresponding lobes therethrough; and

a plurality of magnets circumferentially spaced about the rotor and extending through the ring assemblies, each magnet being generally parallel to the axis of the

rotor and being disposed between corresponding pairs of poles of each ring assembly;  
and

a plurality of circumferentially spaced magnet retention elements projecting from a first side of the backing plate, each magnet retention element extending between corresponding pairs of poles, wherein said magnet retention ring prevents radial movement of said plurality of magnets.

Claim 11 (cancelled)

Claim 12 (currently amended): The rotor assembly of claim 11 wherein each magnet retention element of each magnet retention ring has a retaining bar projecting from a corresponding terminal end thereof and wherein each backing plate includes a second side having a plurality of circumferentially spaced retaining bar receipt cavities formed therein, each retaining bar receipt cavity adapted for receiving a corresponding retaining bar of an adjacent magnet retention ring in a mating relationship.

Claim 13 (original): The rotor assembly of claim 10 wherein each of the poles of each ring assembly includes a plurality of laminated pole pieces.

Claim 14 (original): The rotor assembly of claim 13 wherein the rotor includes first and second ends and wherein one of the plurality of ring assemblies is positioned adjacent the first end of the rotor.

Claim 15 (original): The rotor assembly of claim 14 wherein the laminated pole pieces of each of the poles of the one of the plurality of ring assemblies positioned adjacent the first end of the rotor includes a plurality of first pole pieces having a first radial thickness and a plurality of second pole pieces having a second radial thickness.

Claim 16 (original): The rotor assembly of claim 15 wherein the first radial thickness of the first poles pieces is greater than the second radial thickness of the second pole pieces.

Claim 17 (original): The rotor assembly of claim 16 wherein the first poles pieces are positioned adjacent the first end of the rotor.

Claim 18 (original): The rotor assembly of claim 13 wherein each of the laminated pole pieces includes a generally arcuate, radially outer edge.

Claim 19 (original): The rotor assembly of claim 13 wherein each of the laminated pole pieces includes a leading edge and a trailing edge which are asymmetrical.

Claims 20 -29 (withdrawn)

Claim 30 (new): A rotor assembly for an electromechanical machine, comprising:

an end plate having first and second opposite sides;

a rotatable shaft connected to said second side of said end plate so as to translate rotation of shaft to endplate;

a rotor extending from and connected to said first side of said end plate, wherein said rotor comprises a terminal end and a radially outer surface from which extend a plurality of circumferentially spaced lobes;

a plurality of ring assemblies supported on said rotor, wherein each ring assembly comprises:

a plurality of stacks of laminated pole pieces received on said corresponding lobes; and

a magnet retention ring for preventing radial movement of a plurality of magnets, each of said magnet retention rings comprising:

first and second opposite sides;

a plurality of circumferentially spaced lobe-shaped cutouts dimensioned to allow said magnet retention ring to be slid axially onto said lobes of said rotor; and

a plurality of circumferentially spaced magnet cutouts therein for allowing said corresponding magnets to pass therethrough and be disposed between pairs of said stacks of said laminated pole pieces in said ring assemblies;

a plurality of circumferentially spaced retaining bar receipt cavities provided in said second side of said magnet retention ring;

a plurality of circumferentially spaced magnet retention elements projecting from



said first side of said magnet retention ring, wherein each of said magnet retention elements terminates at an end surface from which axially projects a retaining bar axially aligned with a corresponding retaining bar receipt cavity formed in said second side of said magnet retention ring such that said retaining bar may be axially received within a corresponding retaining bar receipt cavity formed in a second side of said magnet retention ring of an adjacent ring assembly so as to interlock adjacent ring assemblies; and

a second end plate secured to said terminal end of said rotor to maintain said ring assemblies and said magnets thereon.

Claim 31 (new): A rotor assembly for an electromechanical machine, comprising:

a rotor,

a plurality of lobes projecting radially from said rotor,

a plurality of ring assemblies supported on said rotor, wherein each of said ring assemblies comprises:

a magnet retention ring for preventing radial movement of a plurality of magnets, said magnet retention ring comprising a plurality of lobe-shaped cutouts dimensioned to allow said magnet retention ring to be slid axially onto the lobes of the rotor; and

a plurality of stacks of laminated pole pieces, each of said stacks of laminated pole pieces being received on a corresponding lobe, wherein each of said corresponding lobes retains said corresponding stack of laminated pole

pieces thereon and one of said magnets is positioned between each of said stacks, and

a plurality of magnet retention elements projecting from a first side of said magnet retention ring, each of said magnet retention elements extending between each of said stacks of laminated pole pieces,

whereupon rotational movement of said rotor, said magnets are prevented from moving radially by said magnet retention ring and said stacks of laminated pole pieces are prevented from moving radially by said lobes.

Claim 32 (new): A rotor assembly for an electromechanical machine, comprising:

a rotor,

a plurality of stacks of laminated pole pieces disposed on said rotor,

a plurality of magnets wherein one of said magnets is disposed between each of said stacks of laminated pole pieces,

a first means for retaining each of said magnets between each of said stacks of laminated pole pieces, and

a second means for retaining each of said stacks of laminated pole pieces on said rotor,

whereupon rotational movement of said rotor, said magnets are prevented from moving radially by said first means and said stacks of laminated pole pieces are prevented from moving radially by said second means.

Claim 33 (new): The rotor assembly of claim 1, wherein said rotor has a terminal end, said first set of laminated pole pieces having a radial thickness  $T$  are adjacent said terminal end and said second set of laminated pole pieces have a radial thickness  $T'$  wherein  $T'$  is greater than  $T$ .

Claim 34 (new): The rotor assembly of claim 33, wherein said first and said second sets of laminated pole pieces have an inner edge contiguous with an outer surface of said corresponding lobe.

Claim 35 (new): The rotor assembly of claim 1, wherein said first and second sets of laminated pole pieces have a leading and a trailing edge and a recess is provided within each of said edges.

Claim 36 (new): The rotor assembly of claim 1, wherein said magnet has a trapezoidal shape.

## REMARKS

At page 2 of the Office Action, the Examiner objects to claim 18 because, in the Examiner's view, the word "arcuate" is misspelled. The Applicant disagrees with the Examiner and refers the Examiner to page 66 of The American College Dictionary (See Exhibit A attached hereto) wherein the word "arcuate", meaning "bent or curved like a bow", is spelled "arcuate". Therefore, the spelling of this word in claim 18 is correct and no amendment to the claim is required. Reconsideration and withdrawal of this objection is respectfully requested.

At pages 2 - 4 of the Office Action the Examiner rejects claims 1, 3 - 4, 10, 13 - 14, and 18 - 19 under 35 U.S.C. §102(b) as being anticipated by Noodleman (U.S. Patent No. 3,979,821). Also at page 4 of the Office Action the Examiner states that claims 2, 5 - 9, 11 - 12, and 15 - 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In response, the Applicant has amended rejected independent claim 1 to include the limitation of allowable dependent claim 2, now cancelled. The Applicant has also amended rejected independent claim 10 to include the limitation of allowable dependent claim 11, now cancelled. The reference of Noodleman does not anticipate, nor does it teach or suggest, the invention set forth in the claims as amended. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

New claim 30 finds support in the specification beginning at page 8, line 25 and continuing to page 11, line 16. New claim 31 finds support in the specification beginning at page 9, line 3 and continuing to page 10, line 28. New claim 32 finds

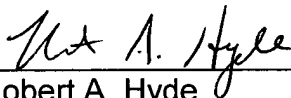
support in the specification at page 9, line 3 and continuing to page 11, line 9. Support for new claim 33 is found in the specification at page 11, line 28 to page 12, line 5 and support for new claim 34 is found at page 12, lines 6 – 12. Finally, new claim 36 finds support in the specification at page 4, lines 6 – 8.

### Conclusion

In view of the above amendments and remarks it is believed that all of the claims, as amended, in addition to the new claims are in a condition for allowance. Reconsideration by the Examiner of the claims is respectfully requested and the allowance thereof is courteously solicited.

If it is believed that further discussion or amendment would help to advance the prosecution of the captioned matter, the Examiner is invited to telephone the undersigned.

Respectfully submitted,



Robert A. Hyde  
Registration No. 46,354

July 15, 2003

Norris, McLaughlin & Marcus  
721 Route 202/206  
P.O. Box 1018  
Somerville, New Jersey 08876  
908-722-0700

Attorney Docket No. 20776-114

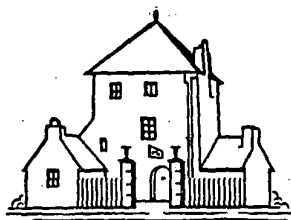
# THE AMERICAN COLLEGE DICTIONARY

C. L. BARNHART, *Editor in Chief*

JESS STEIN, *Managing Editor*

*Assisted and Advised*

*By 355 Authorities and Specialists*



RANDOM HOUSE • NEW YORK

© Copyright, 1961, by Random House, Inc.

Copyright, 1947, 1948, 1949, 1950, 1951, 1952, 1953,  
1954, 1955, 1956, 1957, 1958, 1959, 1960, by Random House, Inc.

Copyright in Canada, 1947, 1948, 1949, 1950, 1951, 1952, 1953,  
1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, by Random House of Canada, Limited.

*All rights reserved  
under International and Pan-American Copyright Conventions*

PUBLISHED IN NEW YORK BY RANDOM HOUSE, INC.,  
AND SIMULTANEOUSLY IN TORONTO BY  
RANDOM HOUSE OF CANADA, LIMITED.

*American College Dictionary and its abbreviation ACD are  
trademarks of Random House, Inc.*

nm. re/me

Library of Congress Catalog Card Number: 61-7309

Entered words which we have reason to believe constitute trademarks have been designated as such. However, neither the presence nor the absence of such a designation should be regarded as affecting the legal status of any trademark.

Copyright acknowledgments to the American Institute of Electrical Engineers for the use of certain definitions from *American Standard Definitions of Electrical Terms*; to the American Society of Civil Engineers for the use of certain definitions from *Manual of Engineering Practice No. 15, Definitions of Surveying Terms* (1938); to the Porcelain Enamel Institute for the use of certain definitions from *Porcelain Enamel Terms and Their Definitions*; and to the Viking Press for the use of a quotation from *Grapes of Wrath* by John Steinbeck. Acknowledgment is also made to the United States Department of Defense for the use of certain definitions in *Dictionary of United States Army Terms* (TM 20-205) and *The Weather Observer* (TM 1-235).

*Manufactured in the United States of America*

General Int

Editorial Ac

Special Con

Editorial St

Prefaces

Selectio

Pronun

Treatm

Synony

Usage

British

Table of C

Explanator

A DICTIO

Appendices

Comm

A Guic

Colleg



# arctic

**arctic** (ärk'tik or, esp. for 4, är'tik), *adj.* 1. of, at, or near the North Pole; frigid. 2. *Astron.* of, near, or lying under the Great and the Little Bear. —*n.* 3. the arctic regions. 4. (pl.) warm waterproof overshoes. [t. L. *s. arcticus*, t. Gk.: *m. arktikos* of the Bear (constellation), northern; r. ME *artik*, t. OF: *m. artique*]

**Arctic Circle**, the southern boundary of the North Frigid Zone, 23°28' from the North Pole.

**Arctic Ocean**, an ocean N of North America, Asia, and the Arctic Circle. ab. 5,400,000 sq. mi.

**Arctic Zone**, the section of the earth's surface lying between the Arctic Circle and the North Pole.

**Arc-tu-rus** (ärk'tydör/əs, -tör/), *n.* *Astron.* a bright star of the first magnitude in the constellation Bootes. [t. L. t. Gk.: *m. Arktouros*, lit., guard of the Bear, f. *arktos* a bear, the Great Bear + *oëros* guardian]

**arcuate** (är'kyüd/it, -ät/), *adj.* bent or curved like a bow. Also, *ar/cu-at/ed*. [t. L.: *m. s. arcuatus*, pp.]

**-ard**, a noun suffix, orig. intensive but now often deprecativ or without special force, as in *coward*, *drunkard*, *wizard*. Also, *-art*. [t. OF: *-ard*, *-art*, t. G: *m. -hart*, *-hard* hardy, c. HARD]

**ar-deb** (är'déb), *n.* a unit of capacity used for dry measure in Egypt to 5.62 U. S. bushels, but varying greatly in different localities. [t. Ar.: *m. ardab*, t. Gk.: *m. artabē*, t. O Pers.: *m. artaba*]

**Ar-den** (är'dän), *n.* Forest of, a forest district formerly in central and E England, now restricted to N Warwickshire: scene of Shakespeare's *As You Like It*.

**ar-den-cy** (är'dän/s), *n.* warmth of feeling; ardor.

**Ar-dennes** (är'dän), *n.* Forest of, a wooded plateau along the Meuse river, in NE France, SE Belgium, and Luxembourg; German counteroffensive, Dec., 1944-Jan., 1945.

**ar-derit** (är'dant), *adj.* 1. glowing with feeling, earnestness, or zeal; passionate; fervent: *ardent vows*, *an ardent patriot*. 2. glowing; flashing. 3. burning; fiery, or hot. [t. L.: *s. ardens*, ppr. burning; r. ME *ardant*, t. OF: *m. ardent*] **ar-derit-ly**, *adv.* —*Syn.* 1. fervid, eager, enthusiastic; vehement.



Forest of Ardenne

**ardent spirits**, strong alcoholic liquors made by distillation, as brandy, whiskey, or gin.

**ar-dor** (är'dör), *n.* 1. warmth of feeling; fervor; eagerness; zeal. 2. burning heat. Also, *esp. Brit.*, *ardour*. [ME, t. OF, g. L] —*Syn.* 1. fervency, passion.

**ar-du-ous** (är'djōəs), *adj.* 1. requiring great exertion; laborious; difficult: *an arduous enterprise*. 2. energetic; strenuous: *making an arduous effort*. 3. hard to climb; steep: *an arduous path*. 4. hard to endure; severe; full of hardships: *an arduous winter*. [t. L.: *m. arduus*] **ar-du-ous-ly**, *adv.* —*ar/du-ous-ness*, *n.* —*Syn.* 1. tollsome, onerous, wearisome, exhausting.

**are** (är; unstressed ar), *v.* pres. indic. pl. of the verb *be*. [d. OE (Northumbrian) *aron*]

**are²** (är, är), *n.* Metric System. a surface measure equal to 100 square meters, or 119.6 square yards; a hundredth of a hectare. [t. F, t. L.: *m. s. area* AREA]

**are-a** (är'ä), *n.* pl. *areas*, (*in Biol.*, often) *areae* (är'Yä/), 1. any particular extent of surface; region; tract: *the settled area*. 2. extent, range, or scope: *the whole area of science*. 3. a piece of unoccupied ground; an open space. 4. the space or site on which a building stands; the yard attached to or surrounding a house. 5. *Brit.* *areaway* (def. 1). 6. *Math.* amount of surface (plane or curved); two-dimensional extent. 7. *Anat.*, *Physiol.* a zone of the cerebral cortex with a specific function. [t. L.: piece of level ground, open space] —*ar'e-al*, *adj.*

**are-a-way** (är'äwä/), *n.* 1. a sunken area leading to a cellar or basement entrance, or in front of basement or cellar windows. 2. U.S. a passageway.

**are-ca** (är'äkä, är'ä/), *n.* 1. any palm of the genus *Areca*, of tropical Asia and the Malay Archipelago, esp. *A. catechu*, the betel palm, which bears a nut (the *areca nut*). 2. the nut itself. 3. any of various palms formerly referred to the genus *Areca*. Also, *areca palm* for 1, 3. [t. Pg., t. Malayalam: *m. ädekkā*, ult. t. Tamil]

**Are-ci-bo** (är'sē/bō), *n.* a seaport in N Puerto Rico. 28,659 (1950).

**are-na** (är'nä), *n.* 1. the oval space in a Roman amphitheater for combats or other performances. 2. the scene of any contest. 3. a field of conflict or endeavor: *the arena of politics*. [t. L.: sand, sandy place]

**are-na-ceous** (är'näshəs), *adj.* sandlike; sandy. [t. L.: *m. arenaceus* sandy]

**are-nic-o-lous** (är'näkö/ləs), *adj.* inhabiting sand. [f. s. L *arena* sand + (-)colous]

**aren't** (änt for 1, änt for 2), 1. contraction of *are not*. 2. *Chiefly Brit.* *an't* (def. 2).

**are-o-cen-tric** (är'Yōsän/trik), *adj.* *Astron.* having the planet Mars as center. [f. *areo-* (comb. form of *ARES*) + *centric*]

**are-o-la** (är'Yōlā), *n.* pl. -lae (-lē/), -las. *Biol.* 1. a ring of color, as around a pustule or the human nipple.

# argon

2. a small interstice, as between the fibers of connective tissue. [t. L. dim. of *area* AREA] —*are-o-lar*, *adj.* —*are-o-late* (är'Yōlāt, -lāt/), *adj.* —*are-o-la-tion* (är'Yōlā/shən), *n.*

**are-ole** (är'Yōl/), *n.* *Biol.* an areola. [t. F, t. L.: *m. areola*, dim. of *area* open space]

**Are-op-a-gite** (är'Yōp/əjit/, -git/), *n.* *Gk. Hist.* a member of the council of the Areopagus. —*Are-op-a-git-ic* (är'Yōp/əjit/ik), *adj.*

**Are-op-a-git-ica** (är'Yōp/əjit/ikə), *n.* a pamphlet (1644) by Milton, advocating freedom of the press.

**Are-op-a-gus** (är'Yōp/əgəs), *n.* 1. a hill in Athens, Greece, to the west of the Acropolis. 2. *Gk. Hist.* the council which met on this hill, originally having wide public functions but later a purely judicial body. 3. any high tribunal. [t. L. t. Gk.: *m. Areiōpagos* hill of Ares (Mars.) Cf. Acts, 17, 19, 22]

**Are-qui-pa** (är'rēkē/pā), *n.* a city in S Peru. 79,185 (1940).

**Ares** (är'ez), *n.* the Greek god of war, identified by the Romans with Mars. [t. L. t. Gk.]

**arête** (är'ēt/), *n.* *Phys. Geog.* a sharp ridge of a mountain; the divide between two glaciated valleys. [t. F, g. L *arista* awn, spine]

**are-thu-sa** (är'äthōs/ə), *n.* 1. any plant of the North American genus *Arethusa*, consisting of one species, *A. bulbosa*, a small bog orchid with a pink, or occasionally white, flower. 2. (*cap.*) *Gk. Myth.* a nymph metamorphosed into a spring on the island of Ortygia (near Syracuse, Sicily) to save her from the pursuing river god, Alpheus.

**Are-ti-no** (är'rēt/nō), *n.* Pietro (pyē'trō), 1492-1556, Italian satirist and dramatist.

**Are-zo** (är'ēt/tsō), *n.* a city in central Italy. 69,000 (est. 1954).

**Arg.**, Argentina.

**arg.**, argentum.

**arg-al¹** (är'gal), *n.* argol.

**arg-al²** (är'gol), *n.* argali.

**arg-a-li** (är'gä/lī), *n.* pl. -li. a wild sheep of Asia, *Ovis ammon*, with long, thick, spirally curved horns. Also, *argal*. [t. Mongolian]

**ar-gent** (är'jont/), *n.* 1. *Archaic* or *Poetic*. silver. 2. something resembling it. 3. Obs. money. —*adj.* 4. like silver; silvery-white. [t. F, g. L *argentum* silver]

**ar-gen-tal** (är'jēn'täl), *adj.* of, pertaining to, containing, or resembling silver.

**ar-gen-te-ous** (är'jēn'tē/əs), *adj.* silvery. [t. L.: *m. argenteus*]

**Ar-gen-teuil** (ärzhän'tō/yl), *n.* a city in N France, on the Seine near Paris. 63,316 (1954).

**ar-gen-tic** (är'jēn'tik), *adj.* *Chem.* of or containing silver, with a valence greater than the corresponding argentic compound.

**ar-gen-tif-er-ous** (är'jēn'tif/erəs), *adj.* silver-bearing. [f. s. L *argentum* silver + (-)ferous]

**Ar-gen-ti-na** (är'jēn'tē/nä; Sp. är'hēn'tē/nä), *n.* a republic in S South America. 19,470,000 pop. (est. 1956); 1,084,120 sq. mi. *Cap.* Buenos Aires.

**Ar-gen-tine** (är'jēn'tēn/, -tīn/), *n.* 1. a native or inhabitant of Argentina. —*adj.* 2. of or pertaining to Argentina. Also, *Ar-gen-tin-e-an* (är'jēn'tīn/yan).

**ar-gen-tine** (är'jēn'tīn/, -tīn/), *adj.* 1. pertaining to or resembling silver. [f. s. L *argentum* silver + -ine¹] —*n.* 2. a silvery substance obtained from fish scales, used in making imitation pearls. [f. s. L *argentum* silver + -ine²]

**ar-gen-tite** (är'jēn'tīt/), *n.* a mineral, silver sulfide, Ag₂S, a dark lead-gray sectile mineral occurring in crystals and massive; an important ore of silver. [f. s. L *argentum* silver + -ite¹]

**ar-gen-tous** (är'jēn'təs), *adj.* *Chem.* containing monovalent silver (Ag⁺), as *argentous chloride*, AgCl.

**ar-gen-tum** (är'jēn'təm/), *n.* *Chem.* silver. [t. L]

**ar-gil** (är'jil/), *n.* clay, esp. potter's clay. [var. of *argill* (t. L.: *m. argilla*, t. Gk.: white clay)]

**ar-gil-la-ceous** (är'jäläshəs), *adj.* 1. of the nature of or resembling clay; clayey. 2. containing a considerable amount of clayey matter.

**ar-gil-lite** (är'jälit/), *n.* any compact sedimentary rock composed mainly of clay minerals. [f. s. L *argilla* white clay + -ite¹]

**ar-gi-nine** (är'jōn/nī/), *n.* one of the essential amino acids, C₆H₁₃O₂N₄, which make up plant and animal proteins, present in the sperm of salmon and herring.

**Ar-give** (är'jiv/, -giv/), *adj.* 1. of or pertaining to Argos. 2. Greek. —*n.* 3. a native of Argos. 4. any Greek.

**Ar-go** (är'gō), *n.* 1. *Astron.* a very large southern constellation, now divided into four, lying largely south of Canis Major. 2. *Gk. Legend.* the ship in which Jason sailed in quest of the Golden Fleece.

**ar-gol** (är'gal/), *n.* crude tartar. Also *argal*. [ME *argolle*, t. AF: *m. argol*]

**Ar-go-lis** (är'gölīs), *n.* 1. an ancient district in SE Greece. 2. Gulf of, a gulf of the Aegean, in SE Greece.

**ar-gon** (är'gōn/), *n.* a colorless, odorless, chemically inactive, monatomic, gaseous element. Symbol: Ar; at. no.: 18; at. wt.: 39.94. [t. NL, t. Gk., prop. neut. of *argos* idle]



Siberian argali, *Ovis ammon* (4 ft. high at the shoulder, spread of horns 3 ft.)

# Argonaut

**Argo-naut** (är'gōnōt/), *n.* 1. the band that sailed to Colchis. 2. *Argo*, in search of the Golden Fleece, sailed to California in 1948. 3. *Argonauts*, a group of gold miners. 4. (*l.c.*) the *Argonauta*, t. Gk.: *m. Argonautae* sailor]. —*Ar/go-naut-ic*, *adj.*

**Argonne Forest** (är'gōn/), *n.* a wooded region in NE France; battles, 1918, 1919.

**Argos** (är'gōs, -gēs), *n.* an ancient city in SE Greece, the center of Argolis; a powerful rival of Athens, Athens, and Corinth.

**ar-gos-y** (är'gēs/), *n.* pl. -sies. 1. *esp.* one with a rich cargo. 2. *Argos*, a vessel of R.

**ar-gol** (är'gōl/, -gōl/), *n.* the pect of any class or group; originally, a group, devised for purposes.

**ar-gue** (är'gü/), *v.* -gued, -guing. 1. to argue for or against a thing; to dispute. 2. to contend in law. 3. to contend in a debate. 4. to argue the case. 5. to argue that something is, drive, etc., by reasoning. 6. to show; prove; imply. 7. to argue (n), t. OF: *m. arguer*, *arguer* show]. —*ar/gu-a-ble*, *a.*

**ar-gue** (är'gü/), *v.* -gued, -guing. 1. ARGUE, DEBATE, DISCUSS. 2. to support or refute an assertion. 3. ARGUE implies reasoning or not necessarily imply opposition. 4. means to present varied opinions. 5. means to debate is to: opposing arguments, esp. on a special amendment.

**ar-gu-ment** (är'gyū/mənt/), *n.* 1. to argue or wrangle. [f. Ar.] 2. a process of reasoning. 3. a process of reasoning. 4. a process of reasoning. 5. a process of reasoning. 6. a process of reasoning. 7. a process of reasoning. 8. a process of reasoning. 9. a process of reasoning. 10. a process of reasoning. 11. a process of reasoning. 12. a process of reasoning. 13. a process of reasoning. 14. a process of reasoning. 15. a process of reasoning. 16. a process of reasoning. 17. a process of reasoning. 18. a process of reasoning. 19. a process of reasoning. 20. a process of reasoning. 21. a process of reasoning. 22. a process of reasoning. 23. a process of reasoning. 24. a process of reasoning. 25. a process of reasoning. 26. a process of reasoning. 27. a process of reasoning. 28. a process of reasoning. 29. a process of reasoning. 30. a process of reasoning. 31. a process of reasoning. 32. a process of reasoning. 33. a process of reasoning. 34. a process of reasoning. 35. a process of reasoning. 36. a process of reasoning. 37. a process of reasoning. 38. a process of reasoning. 39. a process of reasoning. 40. a process of reasoning. 41. a process of reasoning. 42. a process of reasoning. 43. a process of reasoning. 44. a process of reasoning. 45. a process of reasoning. 46. a process of reasoning. 47. a process of reasoning. 48. a process of reasoning. 49. a process of reasoning. 50. a process of reasoning. 51. a process of reasoning. 52. a process of reasoning. 53. a process of reasoning. 54. a process of reasoning. 55. a process of reasoning. 56. a process of reasoning. 57. a process of reasoning. 58. a process of reasoning. 59. a process of reasoning. 60. a process of reasoning. 61. a process of reasoning. 62. a process of reasoning. 63. a process of reasoning. 64. a process of reasoning. 65. a process of reasoning. 66. a process of reasoning. 67. a process of reasoning. 68. a process of reasoning. 69. a process of reasoning. 70. a process of reasoning. 71. a process of reasoning. 72. a process of reasoning. 73. a process of reasoning. 74. a process of reasoning. 75. a process of reasoning. 76. a process of reasoning. 77. a process of reasoning. 78. a process of reasoning. 79. a process of reasoning. 80. a process of reasoning. 81. a process of reasoning. 82. a process of reasoning. 83. a process of reasoning. 84. a process of reasoning. 85. a process of reasoning. 86. a process of reasoning. 87. a process of reasoning. 88. a process of reasoning. 89. a process of reasoning. 90. a process of reasoning. 91. a process of reasoning. 92. a process of reasoning. 93. a process of reasoning. 94. a process of reasoning. 95. a process of reasoning. 96. a process of reasoning. 97. a process of reasoning. 98. a process of reasoning. 99. a process of reasoning. 100. a process of reasoning. 101. a process of reasoning. 102. a process of reasoning. 103. a process of reasoning. 104. a process of reasoning. 105. a process of reasoning. 106. a process of reasoning. 107. a process of reasoning. 108. a process of reasoning. 109. a process of reasoning. 110. a process of reasoning. 111. a process of reasoning. 112. a process of reasoning. 113. a process of reasoning. 114. a process of reasoning. 115. a process of reasoning. 116. a process of reasoning. 117. a process of reasoning. 118. a process of reasoning. 119. a process of reasoning. 120. a process of reasoning. 121. a process of reasoning. 122. a process of reasoning. 123. a process of reasoning. 124. a process of reasoning. 125. a process of reasoning. 126. a process of reasoning. 127. a process of reasoning. 128. a process of reasoning. 129. a process of reasoning. 130. a process of reasoning. 131. a process of reasoning. 132. a process of reasoning. 133. a process of reasoning. 134. a process of reasoning. 135. a process of reasoning. 136. a process of reasoning. 137. a process of reasoning. 138. a process of reasoning. 139. a process of reasoning. 140. a process of reasoning. 141. a process of reasoning. 142. a process of reasoning. 143. a process of reasoning. 144. a process of reasoning. 145. a process of reasoning. 146. a process of reasoning. 147. a process of reasoning. 148. a process of reasoning. 149. a process of reasoning. 150. a process of reasoning. 151. a process of reasoning. 152. a process of reasoning. 153. a process of reasoning. 154. a process of reasoning. 155. a process of reasoning. 156. a process of reasoning. 157. a process of reasoning. 158. a process of reasoning. 159. a process of reasoning. 160. a process of reasoning. 161. a process of reasoning. 162. a process of reasoning. 163. a process of reasoning. 164. a process of reasoning. 165. a process of reasoning. 166. a process of reasoning. 167. a process of reasoning. 168. a process of reasoning. 169. a process of reasoning. 170. a process of reasoning. 171. a process of reasoning. 172. a process of reasoning. 173. a process of reasoning. 174. a process of reasoning. 175. a process of reasoning. 176. a process of reasoning. 177. a process of reasoning. 178. a process of reasoning. 179. a process of reasoning. 180. a process of reasoning. 181. a process of reasoning. 182. a process of reasoning. 183. a process of reasoning. 184. a process of reasoning. 185. a process of reasoning. 186. a process of reasoning. 187. a process of reasoning. 188. a process of reasoning. 189. a process of reasoning. 190. a process of reasoning. 191. a process of reasoning. 192. a process of reasoning. 193. a process of reasoning. 194. a process of reasoning. 195. a process of reasoning. 196. a process of reasoning. 197. a process of reasoning. 198. a process of reasoning. 199. a process of reasoning. 200. a process of reasoning. 201. a process of reasoning. 202. a process of reasoning. 203. a process of reasoning. 204. a process of reasoning. 205. a process of reasoning. 206. a process of reasoning. 207. a process of reasoning. 208. a process of reasoning. 209. a process of reasoning. 210. a process of reasoning. 211. a process of reasoning. 212. a process of reasoning. 213. a process of reasoning. 214. a process of reasoning. 215. a process of reasoning. 216. a process of reasoning. 217. a process of reasoning. 218. a process of reasoning. 219. a process of reasoning. 220. a process of reasoning. 221. a process of reasoning. 222. a process of reasoning. 223. a process of reasoning. 224. a process of reasoning. 225. a process of reasoning. 226. a process of reasoning. 227. a process of reasoning. 228. a process of reasoning. 229. a process of reasoning. 230. a process of reasoning. 231. a process of reasoning. 232. a process of reasoning. 233. a process of reasoning. 234. a process of reasoning. 235. a process of reasoning. 236. a process of reasoning. 237. a process of reasoning. 238. a process of reasoning. 239. a process of reasoning. 240. a process of reasoning. 241. a process of reasoning. 242. a process of reasoning. 243. a process of reasoning. 244. a process of reasoning. 245. a process of reasoning. 246. a process of reasoning. 247. a process of reasoning. 248. a process of reasoning. 249. a process of reasoning. 250. a process of reasoning. 251. a process of reasoning. 252. a process of reasoning. 253. a process of reasoning. 254. a process of reasoning. 255. a process of reasoning. 256. a process of reasoning. 257. a process of reasoning. 258. a process of reasoning. 259. a process of reasoning. 260. a process of reasoning. 261. a process of reasoning. 262. a process of reasoning. 263. a process of reasoning. 264. a process of reasoning. 265. a process of reasoning. 266. a process of reasoning. 267. a process of reasoning. 268. a process of reasoning. 269. a process of reasoning. 270. a process of reasoning. 271. a process of reasoning. 272. a process of reasoning. 273. a process of reasoning. 274. a process of reasoning. 275. a process of reasoning. 276. a process of reasoning. 277. a process of reasoning. 278. a process of reasoning. 279. a process of reasoning. 280. a process of reasoning. 281. a process of reasoning. 282. a process of reasoning. 283. a process of reasoning. 284. a process of reasoning. 285. a process of reasoning. 286. a process of reasoning. 287. a process of reasoning. 288. a process of reasoning. 289. a process of reasoning. 290. a process of reasoning. 291. a process of reasoning. 292. a process of reasoning. 293. a process of reasoning. 294. a process of reasoning. 295. a process of reasoning. 296. a process of reasoning. 297. a process of reasoning. 298. a process of reasoning. 299. a process of reasoning. 300. a process of reasoning. 301. a process of reasoning. 302. a process of reasoning. 303. a process of reasoning. 304. a process of reasoning. 305. a process of reasoning. 306. a process of reasoning. 307. a process of reasoning. 308. a process of reasoning. 309. a process of reasoning. 310. a process of reasoning. 311. a process of reasoning. 312. a process of reasoning. 313. a process of reasoning. 314. a process of reasoning. 315. a process of reasoning. 316. a process of reasoning. 317. a process of reasoning. 318. a process of reasoning. 319. a process of reasoning. 320. a process of reasoning. 321. a process of reasoning. 322. a process of reasoning. 323. a process of reasoning. 324. a process of reasoning. 325. a process of reasoning. 326. a process of reasoning. 327. a process of reasoning. 328. a process of reasoning. 329. a process of reasoning. 330. a process of reasoning. 331. a process of reasoning. 332. a process of reasoning. 333. a process of reasoning. 334. a process of reasoning. 335. a process of reasoning. 336. a process of reasoning. 337. a process of reasoning. 338. a process of reasoning. 339. a process of reasoning. 340. a process of reasoning. 341. a process of reasoning. 342. a process of reasoning. 343. a process of reasoning. 344. a process of reasoning. 345. a process of reasoning. 346. a process of reasoning. 347. a process of reasoning. 348. a process of reasoning. 349. a process of reasoning. 350. a process of reasoning. 351. a process of reasoning. 352. a process of reasoning. 353. a process of reasoning. 354. a process of reasoning. 355. a process of reasoning. 356. a process of reasoning. 357. a process of reasoning. 358. a process of reasoning. 359. a process of reasoning. 360. a process of reasoning. 361. a process of reasoning. 362. a process of reasoning. 363. a process of reasoning. 364. a process of reasoning. 365. a process of reasoning. 366. a process of reasoning. 367. a process of reasoning. 368. a process of reasoning. 369. a process of reasoning. 370. a process of reasoning. 371. a process of reasoning. 372. a process of reasoning. 373. a process of reasoning. 374. a process of reasoning. 375. a process of reasoning. 376. a process of reasoning. 377. a process of reasoning. 378. a process of reasoning. 379. a process of reasoning. 380. a process of reasoning. 381. a process of reasoning. 382. a process of reasoning. 383. a process of reasoning. 384. a process of reasoning. 385. a process of reasoning. 386. a process of reasoning. 387. a process of reasoning. 388. a process of reasoning. 389. a process of reasoning. 390. a process of reasoning. 391. a process of reasoning. 392. a process of reasoning. 393. a process of reasoning. 394. a process of reasoning. 395. a process of reasoning. 396. a process of reasoning. 397. a process of reasoning. 398. a process of reasoning. 399. a process of reasoning. 400. a process of reasoning. 401. a process of reasoning. 402. a process of reasoning. 403. a process of reasoning. 404. a process of reasoning. 405. a process of reasoning. 406. a process of reasoning. 407. a process of reasoning. 408. a process of reasoning. 409. a process of reasoning. 410. a process of reasoning. 411. a process of reasoning. 412. a process of reasoning. 413. a process of reasoning. 414. a process of reasoning. 415. a process of reasoning. 416. a process of reasoning. 417. a process of reasoning. 418. a process of reasoning. 419. a process of reasoning. 420. a process of reasoning. 421. a process of reasoning. 422. a process of reasoning. 423. a process of reasoning. 424. a process of reasoning. 425. a process of reasoning. 426. a process of reasoning. 427. a process of reasoning. 428. a process of reasoning. 429. a process of reasoning. 430. a process of reasoning. 431. a process of reasoning. 432. a process of reasoning. 433. a process of reasoning. 434. a process of reasoning. 435. a process of reasoning. 436. a process of reasoning. 437. a process of reasoning. 438. a process of reasoning. 439. a process of reasoning. 440. a process of reasoning. 441. a process